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BUCKLEY, MASCHOFF & TALWALKAR LLC				
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ZECHER, MICHAEL R				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/700,353

Applicant(s)

DAIDONE ET AL.

Examiner

MICHAEL R. ZECHER

Art Unit

3691

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 11 September 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The following is a final Office Action on the merits. The Amendment/Remarks received on September 11, 2008, have been entered. **Claims 1 & 11** have been amended. **Claims 1-9 & 11** are pending.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. **Claims 1-9 and 11 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

Claims 1-9 and 11 recite processes comprising the steps of receiving, identifying, generating, comparing, running queries, and characterizing. Based on Supreme Court precedent, a proper process must be tied to another statutory class or transform underlying subject matter to a different state or thing (*Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876)). Since neither of these requirements is met by the claim, the method is not considered a patent eligible process under 35 U.S.C. 101. To qualify as a statutory process, the claim should positively recite the other statutory class to which it is tied, for example by identifying the apparatus that accomplished the method steps or positively reciting the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 1, 2, and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al. (2002/0082991) in view of Nelson (6,032,132) and Pintsov (2003/0036918).**

As per claim 1, Friedman et al. discloses a method of identifying billing discrepancies (Abstract), comprising:

receiving billing data from a billing entity, said billing data including an assessed fee and call details associated with each of a plurality of calls made by a customer (page 2, paragraph 0032; page 3, paragraph 0036);

identifying, based at least in part on said call details received from said billing data, rate information associated with said customer (page 3, paragraph 0044);

generating an expected fee for each of said plurality of calls (page 3, paragraph 0044);

comparing, for each of said plurality of calls, said expected fee with said assessed fee to identify discrepancies (page 3, paragraph 0044); and

storing the database of the discrepancies in a computerized device that includes a processor, a communication device and a memory (figure 2, paragraph 28).

However, Friedman et al. fails to expressly disclose:

generating a database of the discrepancies;

running queries against call details associated with calls having discrepancies to determine whether overall charge for the calls having discrepancies varies based on length of each of the calls having discrepancies;

characterizing at least one of the discrepancies as resulting from misapplication of a time dependent charge if a proportion of the discrepancies does not vary with length of the calls having discrepancies.

Nelson teaches a telecommunications access cost management system with a database of discrepancies (col. 2, lines 43-46, via discrepancies are recorded in the production database).

From this teaching of Nelson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of Friedman et al. to include a database of discrepancies as taught by Nelson in order to better keep track of the different billing discrepancies.

Pintsov teaches a system and method for trusted self-billing and payment that runs queries to determine whether there are discrepancies that vary based on the length of calls (page 7, paragraph 0067, via systematically observed difference is a discrepancy that does not vary for multiple charges) and characterizes one of the discrepancies as a misapplication of a time dependent charge (page 7, paragraph 0066, via billing file includes duration of call, charge amount of the call; page 9, paragraph 0077, via discrepancy due to charging with a different rate plan).

From this teaching of Pintsov, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of the Friedman and Nelson combination to include running queries to determine whether discrepancies vary based on the length of calls and characterizing discrepancies as misapplications of time dependant charges as taught by Pintsov in order to identify the type of discrepancy and the cause of it.

As per claim 2, Friedman et al. discloses analyzing each discrepancy to determine if each discrepancy is a billing error (page 3, paragraph 0044).

As per claim 8, Friedman et al. discloses generating a set of discrepancies identified as billing errors (page 7, paragraph 0084).

As per claim 9, Friedman et al. discloses communicating said set of discrepancies identified as billing errors to said billing entity (page 7, paragraph 0084).

6. Claims 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al. in view of Nelson and Pintsov as applied to claim 2 above, and further in view of Zai (6,975,208).

As per claim 3, the Friedman, Nelson, and Pintsov combination discloses all elements of the claimed invention as written above, but fails to expressly disclose analyzing the difference between said expected fee and said assessed fee to identify a pattern associated with a known surcharge.

Zai teaches a variable alarm for communication devices where service providers typically bill their customers using a combination of fixed fees and variable charges (col. 1, lines 21-31).

From this teaching of Zai, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of the Friedman, Nelson, and Pintsov combination to include billing with a combination of fixed and variable fees as taught by Zai in order to identify a billing discrepancy with a known surcharge, or incorrectly applied fixed fee, by looking at differences between expected and actual amounts to see if there is a consistent difference.

As per claim 4, the Friedman, Nelson, and Pintsov combination discloses all elements of the claimed invention as written above, but fails to expressly disclose analyzing discrepancies associated with said billing data to identify discrepancies associated with fixed charges.

Zai teaches a variable alarm for communication devices where service providers typically bill their customers using a combination of fixed fees and variable charges (col. 1, lines 21-31).

From this teaching of Zai, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of the Friedman, Nelson, and Pintsov combination to include billing with a combination of fixed and variable fees as taught by Zai because fixed charges are one of two types of charges and might be incorrectly applied on a bill creating a discrepancy.

As per claim 5, the Friedman, Nelson, and Pintsov combination discloses all elements of the claimed invention as written above, but fails to expressly disclose

analyzing discrepancies associated with said billing data to identify discrepancies associated with time-based charges.

Zai teaches a variable alarm for communication devices where service providers typically bill their customers using a combination of fixed fees and variable charges (col. 1, lines 21-31).

From this teaching of Zai, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of the Friedman, Nelson, and Pintsov combination to include billing with a combination of fixed and variable fees as taught by Zai because time-based, or variable, charges are the other type of charge and might be incorrectly applied on a bill creating a discrepancy.

7. Claims 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al. in view of Nelson and Pintsov as applied to claim 1 above, and further in view of Michaels (6,240,167).

As per claim 6, the Friedman, Nelson, and Pintsov combination discloses all elements of the claimed invention as written above, but fails to expressly disclose said billing data further includes rate information identified by said billing entity for each of said plurality of calls.

Michaels teaches said billing data further includes rate information identified by said billing entity for each of said plurality of calls (col. 14, lines 25-29 and 46-52).

From this teaching of Michaels, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying

billing discrepancies of the Friedman, Nelson, and Pintsov combination to include that the billing data includes rate information for each of the plurality of calls taught by Michaels because rate information is necessary to calculate the total amount to charge a customer.

As per claim 7, the Friedman, Nelson, and Pintsov combination discloses all elements of the claimed invention as written above, but fails to expressly disclose said identifying includes generating a set of customer data including said call details, said rate information associated with said customer, and said expected fee.

Michaels teaches said identifying includes generating a set of customer data including said call details, said rate information associated with said customer, and said expected fee (col. 14, lines 46-52).

From this teaching of Michaels, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of the Friedman, Nelson, and Pintsov combination to include generating a set of customer data including the call details, the rate information associated with the customer, and the expected fee taught by Michaels because generating all of this information facilitates the error-checking process by providing details on how everything is calculated.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman et al. in view of Nelson and Reding et al. (5,822,414).

As per claim 11, Friedman et al. discloses a method of identifying billing discrepancies (Abstract), comprising:

receiving billing data from a billing entity, said billing data including an assessed fee and call details associated with each of a plurality of calls made by a customer (page 2, paragraph 0032; page 3, paragraph 0036);

identifying, based at least in part on said call details received from said billing data, rate information associated with said customer (page 3, paragraph 0044);

generating an expected fee for each of said plurality of calls (page 3, paragraph 0044);

comparing, for each of said plurality of calls, said expected fee with said assessed fee to identify discrepancies (page 3, paragraph 0044); and

storing the database of the discrepancies in a computerized device that includes a processor, a communication device and a memory (figure 2, paragraph 28).

However, Friedman et al. fails to expressly disclose generating a database of the discrepancies.

Nelson teaches a telecommunications access cost management system with a database of discrepancies (col. 2, lines 43-46, via discrepancies are recorded in the production database).

From this teaching of Nelson, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of Friedman et al. to include a database of discrepancies as taught by Nelson in order to better keep track of the different billing discrepancies.

However, the Friedman and Nelson combination fails to expressly disclose running a query to identify discrepancies of substantially a fixed amount to identify calls placed from a public pay phone.

Reding et al. teaches a method and apparatus for automating telecommunications class charging and for reducing operating errors with billing errors associated with pay phone calls (col. 1, lines 25-29, via pay phone call class type; col. 1, lines 46-54, via billing errors where a call may go unbilled or incorrect class charge information is entered).

From this teaching of Reding et al., it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of identifying billing discrepancies of the Friedman and Nelson combination to include pay phone call billing errors as taught by Reding et al. because they are a type of call that may be billed incorrectly creating a discrepancy.

Response to Arguments

9. Applicant's arguments filed September 9, 2008, have been fully considered but they are not persuasive.

In the Remarks, Applicant argues in substance:

(a) The 35 U.S.C. § 101 rejection has been overcome by an amendment to **claims 1 & 11** that ties the recited process to another statutory class of subject matter, i.e., to an apparatus.

(b) Pinstov does not disclose, teach, or suggest running queries to determine whether there are discrepancies that vary based on the length of calls.

(c) The Examiner failed to take in condition the express condition that the proportion of the discrepancies does not vary with length of calls having discrepancies.

(d) Zai does not disclose, teach, or suggest analyzing the difference between expected and actually billing amounts to be looked at "to see if there is a consistent difference."

(e) Reding et al. does not disclose, teach, or suggest identifying discrepancies "of substantially a fixed amount" in order to identify pay phone calls.

In response to (a):

The Examiner respectfully disagrees with Applicant's assertion. As stated above, based on Supreme Court precedent, and recent Federal Circuit decisions, a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780,787-88 (1876). Applicant attempts to overcome this rejection by simply claiming a database within a computer capable of storing billing discrepancies. This is a nominal tie to another apparatus (i.e. computer) and is merely an insignificant extra-solution activity (See *In re Bilski*). Therefore, since Applicant claims inputting, outputting, and storing data without imposing meaningful limits on the claim's scope, the claim amendment filed on September 9, 2008, does not impart patent-eligibility.

In response to (b):

The Examiner respectfully disagrees with Applicant's assertion. In response to applicant's arguments against Pintsov individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In regards to the claim limitation in question, the Examiner cited Applicant to the disclosure in paragraph 67 of Pintsov that teaches and suggests noting systemically observed differences between two systems. Additionally, Pintsov discloses that files contained within the two systems include, among other things, the duration of a call and the charge amount for the call (See paragraph 66). Based on these disclosures, it would have been obvious to one of ordinary skill in the art at the time the invention was made to observe the differences between the two systems, notably the duration of a call and the charge amount of the call, and validate the process or run a query to determine any discrepancies (See paragraphs 66, 67, & 77). Based on a broad and reasonable claim construction, the Examiner maintains that Pintsov teaches and suggests running queries against call details associated with calls having discrepancies to determine

whether overall charge for the calls having discrepancies varies based on length of each of the calls having discrepancies.

In response to (c):

The Examiner respectfully disagrees with Applicant's assertion. In response to applicant's arguments against Pintsov individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

First, Applicant admits on the record that Pintsov's discloses, teaches, and suggests in paragraph 77 that discrepancies arising from the two systems operating on different rate plans can arguably be described as characterizing discrepancies as a misapplication of a time dependent charge (See pg. 7 of the Remarks). Second, taking into account the combined teachings of Friedman et al., Nelson, and Pintsov, specifically the teaching and suggestion in Pintsov concerning the files containing, among other things, the duration of a call and the charge amount for the call (See paragraph 66), it would have been obvious to one of ordinary skill in the art to characterize the billing discrepancies based on a condition that the proportion of the

discrepancies does not vary with the length of calls having a discrepancy. Furthermore, the Examiner would like to add that Applicant failed to particularly point out and distinctly claim the subject matter that Applicant regards as the invention (See 35 U.S.C. § 112, second paragraph) because Applicant did not expressly claim what would occur if the claimed condition was not met. Based on a broad and reasonable claim construction, the Examiner maintains that Pinstov teaches and suggests to one of ordinary skill in the art that characterizing a discrepancy may be based on a proportion of the discrepancies that do not vary with the length of calls having a discrepancy.

In response to (d):

The Examiner respectfully disagrees with Applicant's assertion. In response to applicant's arguments against Zai individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

As noted in the Remarks on pg. 8, the Examiner previously clarified the rejection of claim 3. The Examiner maintains the explanation provided on pgs. 10 & 11 in the previous non-final Office Action. Zai teaches billing customers with a "combination of

fixed access fees and variable charges" (col. 1, lines 21-23). The Friedman et al. and Nelson combination discloses a method of identifying billing discrepancies, therefore, it would have been obvious to one of ordinary skill in the art to include the two types of fees as taught by Zai whereby discrepancies associated with either of the two types are identified. A billing discrepancy for a fixed charge is identified by checking if there is a constant difference between the expected and assessed amounts. Additionally it would have been obvious to one of ordinary skill in the art that if the difference is not constant, a billing discrepancy for a variable, or time-based, charge would be suspected.

In response to (e):

The Examiner respectfully disagrees with Applicant's assertion. In response to applicant's arguments against Reding et al. individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

The Examiner maintains the explanation provided on pg. 11 in the previous non-final Office Action. Reding et al. teaches a method and apparatus for automating telecommunications class charging and for reducing operating errors including billing

errors associated with pay phones (col. 1, lines 25-29, via pay phone call class type; col. 1, lines 46-54, via billing errors where a call may go unbilled or incorrect class charge information is entered). Since Friedman et al. and Nelson teach a method for identifying billing errors and discrepancies, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify this combination to include pay phone billing errors as taught by Reding et al. in order to identify discrepancies associated with pay phone calls.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. ZECHER whose telephone number is (571)270-3032. The examiner can normally be reached on M-F 7:30-5:00 alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Alexander Kalinowski can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alexander Kalinowski/
Supervisory Patent Examiner, Art
Unit 3691

/Michael R. Zecher/
Examiner, Art Unit 3691